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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/591,377	05/24/2007	Pamela C. Iraneta	60326US(49991)	8061
48990 7590 09/24/2010 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874			EXAMINER	
			THERKORN, ERNEST G	
BOSTON, MA 02205		ART UNIT	PAPER NUMBER	
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			MAIL DATE	DELIVERY MODE
			09/24/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/591,377 IRANETA ET AL. Office Action Summary Examiner Art Unit Ernest G. Therkorn 1797 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 27 August 2010. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.2.4.8-11.39.40.87.118.181.237-246.249-251.254-257 and 264-278 is/are pending in the application. 4a) Of the above claim(s) 87, 118, 181, 269-277 is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1,2,4,8-11,39,40,237-246,249-251,254-257,264-268 and 278 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)

Attachment(s)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Art Unit: 1797

Claims 1, 2, 4, 8-11, 39-40, 237-246, 249-251, 254-257, 264-268, and 278 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what the metes and bounds of "secondary particles" are. Claims 238-240 and 245-246 are further considered to be rendered indefinite by the term "media grade". Page 2, lines 14-25 of the specification indicates that phrase is the nominal particle retention rating and not the actual particle retention rating. A fair reading of page 3, lines 1-17 of the specification indicates that there are supports rated to retain .5 micron particles that are not able to retain even 2 micron particles. As such, it is not clear what is meant by the "media grade" because they do not correlate to actual observations.

Claims 267 and 268 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Defining the secondary particles in terms of the chromatographic packing materials renders the claims indefinite because the chromatographic packing materials are not present in the elected frit claims. The claims are considered to be indefinite because they refer to the composition of the packing material. However, the packing materials are not a part of the frit. As such, the claims are indefinite because the packing material may never be present or may be changed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1797

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 8-11, 39, 40, 237-246, 249-251, 254-257, 264-268, and 278 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mott (U.S. Patent No. 4,399,032) in view of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180. Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 are considered to be a single reference. At best, the claims differ from Mott (U.S. Patent No. 4,399,032) in reciting use of secondary particles. PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 (paragraphs 21, 22, and 28) discloses that use of particles inside the pores of a porous stainless steel disc retains packing agents that are 1 micron in size and prevents clogging. It would have been obvious to use secondary particles in Mott (U.S. Patent No. 4,399,032) because PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 (paragraphs 21, 22, and 28) discloses that use of particles inside the pores of a porous stainless steel disc retains packing agents that are 1 micron in size and prevents clogging.

Claim 237 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mott (U.S. Patent No. 4,399,032) in view of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 as applied to claims 1, 2, 4, 8-11, 39, 40, 237-246, 249-251, 254-257, 264-268, and 278 above, and further in view of Shalon (U.S. Patent No. 4,719,011). At best, the claim differs from Mott (U.S. Patent No. 4,399,032) in view of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 in reciting the use of

Art Unit: 1797

316 stainless steel. Shalon (U.S. Patent No. 4,719,011) (column 13, lines 62-65) discloses it is preferable to use 316 stainless steel as a frit material because it is resistant to various solvents, mild buffers, acids, and bases and all organic acids and bases. It would have been obvious to use 316 stainless steel in Mott (U.S. Patent No. 4,399,032) in view of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 because Shalon (U.S. Patent No. 4,719,011) (column 13, lines 62-65) discloses it is preferable to use 316 stainless steel as a frit material because it is resistant to various solvents, mild buffers, acids, and bases and all organic acids and bases.

The remarks urge patentability based upon the allegation that the term "secondary particles" is definite. It is not clear what the metes and bounds of "secondary particles" are. There appears to be no definition of "secondary particles" in the specification. There is no suggestion of how it would differ from a primary or a tertiary particle. It is not clear what meaning the word "secondary" brings to the phrase "secondary particles".

The remarks urge patentability based upon the allegation that the term "media grade" is definite. However, page 2, lines 14-25 of the specification indicates that phrase is the nominal particle retention rating and not the actual particle retention rating. A fair reading of page 3, lines 1-17 of the specification indicates that there are supports rated to retain .5 micron particles that are not able to retain even 2 micron particles. As such, it is not clear what is meant by the "media grade" because they do not correlate to actual observations.

Art Unit: 1797

The remarks urge patentability based upon the allegation that the term "media grade" is definite because it appears in a Mott brochure. However, an electronic search of Class 210 subclasses 635, 656, 657, 658, 659, 198.2, and 198.3, which are a collection of 4,791 patents that form the core of the chromatographic separation art, reveals that only the P.G. Publication of the instant application uses the term. This would at least suggest the term is a proprietary term that means whatever a manufacturer chooses it to mean.

The remarks urge patentability based upon the term "sintered". However, the primary reference, Mott (U.S. Patent No. 4,399,032), discloses the term "sintered" as the third word of the Abstract. At column 4, lines 15-16, Mott (U.S. Patent No. 4,399,032) discloses that his sintered frit is unitary and one piece. As such, Mott (U.S. Patent No. 4,399,032) in view of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 would be sintered, unitary, and one-piece.

The remarks urge patentability based upon filling "to a depth greater than about 10 microns". However, Figure 1 of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 pictorially shows the secondary particles going through the entire filter. In addition, column 4, lines 60-61 of Mott (U.S. Patent No. 4,399,032) discloses a pore size is 10 microns. As such, claim 40 merely requires filling more than one pore of depth. Accordingly, Mott (U.S. Patent No. 4,399,032) in view of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 is considered to disclose filling "to a

Art Unit: 1797

depth greater than about 10 microns" because Figure 1 of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 pictorially shows the secondary particles going through the entire filter. In addition, Mott (U.S. Patent No. 4,399,032) in view of Tajima (Japan Patent No. 2004177180) and PTO Translation No. 10-378177180 of Japan Patent No. 2004177180 is considered to disclose filling "to a depth greater than about 10 microns" because column 4, lines 60-61 of Mott (U.S. Patent No. 4,399,032) discloses a pore size is 10 microns and claim 40 merely requires filling more than one pore of depth.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Application/Control Number: 10/591,377 Page 7

Art Unit: 1797

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ernest G. Therkorn/ Ernest G. Therkorn Primary Examiner Art Unit 1797

EGT September 22, 2010